

# Tentative Outline

## *Special Thematic Issue for the Current Medical Imaging*

### Role of Current Imaging Techniques and New Trends in Breast Cancer

**Sectional Editor (Nuclear Medicine):** Dr. Natale Quartuccio

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• **Scope of the Thematic Issue:** Medical imaging plays an outstanding role in the diagnostic work-up of patients with breast cancer. Patients with suspicious breast lesions commonly undergo Ultrasound, Magnetic Resonance Imaging, and Computed Tomography. Nuclear Medicine is usually involved in the diagnostic path at a later stage; nuclear medicine techniques include lymphoscintigraphy for the identification of the sentinel lymph node, bone scan, and Positron Emission Tomography (PET). PET radiotracers range from the widely clinically used  $^{18}\text{F}$ -Fluorodeoxyglucose ( $^{18}\text{F}$ -FDG) to more unconventional and experimental radiotracers. In the last two decades, the use of artificial intelligence is also surging with the aim to provide additional insights into tumor features that cannot be fully detected by the human eye. This special issue focuses on the latest advances in the field of clinical and experimental imaging and aims to provide a global perspective on the most common imaging techniques that play a pivotal role in breast cancer.

**Keywords:** Magnetic Resonance Imaging, Lymphoscintigraphy, Positron Emission Tomography/Computed Tomography, Radiotracers, Radiotherapy, Artificial Intelligence, Breast cancer.

#### Sub-topics:

- Mammography and breast MRI in patients with breast cancer
- Lymphoscintigraphy for the depiction of the sentinel lymph node
- Positron Emission Tomography imaging in breast cancer
- Conventional and unconventional PET radiotracers
- Radiotherapy in breast cancer
- Artificial Intelligence in breast cancer
- Evaluation of response to therapy

#### Tentative titles of the articles and list of contributors:

##### 1. Prognostic role of volume-based $^{18}\text{F}$ -FDG PET parameters in patients with breast cancer

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##### 3. Lymphoscintigraphy for the depiction of the sentinel lymph node in patients with breast cancer

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#### 7. Current Role and Trends in Radiation Oncology in Breast Cancer

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#### 8. The utility of FDG PET/CT in evaluating response to treatment in patients with breast cancer

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#### Schedule:

- ✧ Manuscript submission deadline: 05/01/2022
- ✧ Announcement of acceptance by the Editors: 5/03/2022
- ✧ Final manuscripts due: 05/05/2022

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